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## Classification Schedule

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## Class 379 TELEPHONIC COMMUNICATIONS

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### 1.01      **DIAGNOSTIC TESTING, MALFUNCTION INDICATION, OR ELECTRICAL CONDITION MEASUREMENT**

- 1.02      . Of audio message storage and retrieval
- 1.03      . Of data transmission
- 1.04      .. Qualifying line for data transmission
- 2          . Including fault responsive disconnection of tested component
- 3          . Of hybrid or echo suppressor or canceller
- 4          . Of repeater
- 7          . For detection of eavesdropping device
- 8          . With blocking of normal usage
- 9          . Of centralized switching system
- 9.01      .. Software compatibility
- 9.02      .. Maintenance console
- 9.03      .. Trouble ticket reporting
- 9.04      .. Record or report generation
- 9.05      .. Backup system
- 9.06      .. Of line interface circuitry
- 14        .. Of plural exchange network
- 14.01    ... Fault segmentation (e.g., error location in network)
- 10.01    .. By automatic testing sequence
- 10.02    ... By call generator
- 10.03    ... Script file generation or execution
- 11        ... Router
- 12        .. With dedicated testing line or trunk
- 13        .. Of call timing or charging equipment
- 15.01    .. Of switching equipment or network element
- 15.02    ... Advanced intelligent network (AIN)
- 15.03    .... Provisioning of service
- 15.04    .... Of plural AIN elements
- 15.05    ..... Determining fault location
- 16        ... Of switching path
- 17        ... Of switching selector

- 18 ... By use of call address signal
- 19 ... Rapid manual connecting structure for test equipment
- 20 .. Of switchboard element condition (e.g., lamp)
- 21 . Using portable test set (e.g., handset type)
- 22 . Of trunk or long line
- 22.01 .. By loopback
- 22.02 .. By analysis of injected tone signal
- 22.03 .. Fault detection or fault location on telephone link (e.g., continuity, leakage)
- 22.04 ... Of digital loop carrier
- 22.05 .... Pair gain test controller
- 22.06 ... Having special connector
- 22.07 ... Telephone multiconducting wires (e.g., tip, ring and ground wires)
- 22.08 ... Noise
- 23 .. Of line signalling
- 24 .. Electrical parameter measurement (e.g., attenuation)
- 25 .. Conductor identification or location
- 26.01 . Testing of network terminating interface, subscriber trunk interface, or service function
- 26.02 .. With a programmable or self-test device
- 27.01 . Testing of subscriber loop or terminal
- 27.02 .. By generating call signal
- 27.03 .. By analysis of testing signal
- 27.04 .. By automatic testing sequence (e.g., programmable, test, script or test call generation program)
- 27.05 .. Having protection circuit (e.g., surge or short circuit protector)
- 27.06 .. Having electromechanical switch or relay
- 27.07 .. Having plugging maintenance or test module
- 27.08 .. Including sampling measurement technique
- 28 .. Of data transmission instrument
- 29.01 .. Terminal arrangement to enable remote testing (e.g., testing interface)
- 29.02 ... By simulator (e.g., computer simulates testing personnel)
- 29.03 ... Voltage or current determination
- 29.04 ... Voltage or current detector
- 29.05

- ... Metallic loop testing
- 29.06 ... By dialing back the calling terminal
- 29.07 ... For a fault caused by an off-hook status
- 29.08 ... For a fault caused by new added service or equipment (e.g., software compatible)
- 29.09 ... With historical operating information database
- 29.1 ... Visual output (e.g., printing, displaying)
- 29.11 ... Having telephone maintenance termination unit (e.g., MTU)
- 30 .. Loop impedance (e.g., resistance, capacitance)
- 31 .. Of line signalling generator (e.g., dial, tone code generator)
- 32.01 . Monitoring
- 32.02 .. Trunk or long line
- 32.03 ... AIN link
- 32.04 .. Subscriber line
- 32.05 .. Call tracing
- 33 .. Alarm or emergency (e.g., cut line)
- 35 .. Listening-in or eavesdropping type
- 36 **FREE CALLING FROM PAYSTATION**
- 37 **EMERGENCY OR ALARM COMMUNICATIONS (E.G., WATCHMAN'S CIRCUIT)**
- 38 . Personal monitoring (e.g., for the ill or infirm)
- 39 . Responsive to sensed nonsystem condition
- 40 .. Automatic dialing
- 41 .. Transmission of recorded audio message
- 42 .. Plural conditions
- 43 .. Fire
- 44 .. Intrusion
- 45 . Central office responsive to emergency call or alarm (e.g., "911", operator position display)
- 46 . Called line or station condition responsive (e.g., recall if busy)
- 47 . Plural alarms over single line
- 48 . Announcement or alarm received at terminal station (e.g., "butt-in", alarm)
- 49 . Central station with plural substations
- 50 . By pulse or digital signal
- 51 . With automatic dialing or transmission of recorded audio message
- 52 **INCLUDING AID FOR HANDICAPPED USER (E.G., VISUAL, TACTILE, HEARING AID COUPLING)**
- 55.1 **HAVING NEAR FIELD LINK (E.G., CAPACITIVE, INDUCTIVE)**
- 56.1 **HAVING LIGHT WAVE OR ULTRASONIC LINK FOR SPEECH OR PAGING SIGNAL**
- 56.2 . Including fiber optic link within telephone network
- 56.3 . Including infra-red link with landline telephone network
- 67.1 **AUDIO MESSAGE STORAGE, RETRIEVAL, OR SYNTHESIS**

- 68 . Dynamic audio signal recording or reproduction
- 69 .. Call originating
- 70 .. Call intercept or answering
- 71 ... Consecutive use of recorded phrases or words to form message
- 72 ... Sequential or repeated announcement during single call initiated cycle
- 73 ... Plural record carrier channels
- 74 ... Remote control over telephone line
- 75 .... Remote dictation
- 76 .... Announcement selection or replacement
- 77 .... Control by generated tone
- 78 ... Acoustic coupling
- 79 ... With specified call initiated cycle control circuitry
- 80 .... Voice signal presence responsive
- 81 .... Call termination responsive (e.g., hang-up)
- 82 .... Having specified call initiation (e.g., ringing) responsive circuitry
- 83 .... Structural detail of storage medium drive
- 84 ... At switching facility (e.g., central office, switchboard)
- 85 .. Recording of telephone signal during normal operation
- 86 ... Inductive pickup
- 87 .. Reproduced signal distributed over telephone line
- 88.01 . Voice activation or recognition
- 88.02 .. Voice verification (e.g., voice authorization, voiceprint, etc.)
- 88.03 .. Voice dialing
- 88.04 .. Voice controlled message management
- 88.05 . Multilingual system or operation
- 88.06 .. Language selection
- 88.07 . Digital signal processing (DSP)
- 88.08 . Message signal analysis
- 88.09 .. Statistical analysis (e.g., time, date, length of message, etc.)
- 88.1 .. Including data compression
- 88.11 . Display of message related information
- 88.12 . Indication or notification of message
- 88.13 . Multimedia system (e.g., voice output combined with fax, video, text, etc.)
- 88.14 .. Presentation format conversion
- 88.15 .. Pager activation
- 88.16 . Voice message synthesis
- 88.17

- . Interaction with an external nontelephone network (e.g., Internet)
- 88.18 . Interacting voice message systems
- 88.19 . Call source identification
- 88.2 .. Automatic Number Identification (ANI)
- 88.21 .. Caller identification received at substation
- 88.22 . Message management
- 88.23 .. Controlled by subscriber or caller
- 88.24 ... By generated tone
- 88.25 ... Message storage in centralized location (e.g., central office, PBX, etc.)
- 88.26 .... Recording voice message from non subscriber caller
- 88.27 .. Separate storage for voice and control information
- 88.28 .. Solid state memory storage
- 90.01 TELEPHONE LINE OR SYSTEM COMBINED WITH DIVERSE ELECTRICAL SYSTEM OR SIGNALLING (E.G., COMPOSITE)**
- 91.01 . Credit authorization
- 91.02 .. At switching station
- 92.01 . Polling
- 92.02 .. Televoting
- 92.03 .. Having central station equipment
- 92.04 .. Having subscriber station equipment
- 93.01 . Having transmission of a digital message signal over a telephone line
- 93.02 .. Access restricting
- 93.03 ... Personal identification
- 93.04 ... Two or more calls
- 93.05 .. Terminal interface circuitry
- 93.06 ... Digital
- 93.07 ... To plural lines or networks
- 93.08 .. Transmission scheme (e.g., compression/decompression, transmission rate)
- 93.09 .. Switching between different terminal types (e.g., voice/data switch)
- 93.11 ... Among at least three terminal types

- 93.12 .. Sales, ordering, or banking system
- 93.13 .. Amusement (e.g., game, lottery)
- 93.14 .. Having switching station
- 93.15 ... Having format conversion
- 93.17 .. Having station display
- 93.18 ... Having tone code recognition for generating alphanumeric characters
- 93.19 ... Having pressure or position sensitive surface (e.g., touch-screen, light pen)
- 93.21 ... Having conferencing
- 93.22 ... At pay station
- 93.23 ... Having user information display (e.g., telephone number, name, address, etc.)
- 93.24 ... Having electronic mail
- 93.25 ... Having remote database (e.g., videotex system)
- 93.26 .. By voice frequency signal (e.g., tone code)
- 93.27 ... Alphanumeric
- 93.28 ... Modulated audio tone
- 93.29 .... Reconfigurable
- 93.31 .... Protocol
- 93.32 ..... Initial setup
- 93.33 ..... Having adjustable speed
- 93.34 ..... Having recognition and selection
- 93.35 .... Having call-waiting
- 93.36 .... Line powered
- 93.37 ... Having acoustic link
- 100.01 . To produce visual-graphic copy (e.g., facsimile)
- 100.02 .. Having detachable device (e.g., detachable storage medium, scanner)
- 100.03 .. Usage system
- 100.04 .. Communication charge calculation
- 100.05 .. Monitoring

- 100.06 .. Communication status notification
- 100.07 .. Using mark sheet
- 100.08 .. Electronic mailbox
- 100.09 .. Relay system
- 100.11 .. From a library
- 100.12 .. Connection to plural networks or lines
- 100.13 .. Format conversion
- 100.14 .. Call signal generation (e.g., auto-dial)
- 100.15 .. Having switching to other communication modes
- 100.16 ... Voice mode
- 100.17 .. Transmission scheme
- 101.01 . Audio program distribution
- 102.01 . Remote control
- 102.02 .. Communication device
- 102.03 ... Entertainment appliance (e.g., TV, VCR, radio, etc.)
- 102.04 ... Power source
- 102.05 .. Of heating, ventilation, air conditioner (e.g., HVAC)
- 102.06 .. Of physical entrance or exit lock
- 102.07 .. Having indication
- 106.01 . Remote indication over telephone line (e.g., telemetry)
- 106.02 .. Patient monitoring
- 106.03 .. Meter reading
- 106.04 ... Having power supply circuitry
- 106.05 ... Having ringing suppression
- 106.06 ... Having time window
- 106.07 ... Having interrogation signal
- 106.08 ... Having line status detection
- 106.09 .. Ringing suppression

- 106.11 .. Interrogation signal
- 108.01 . Telegraphy
- 108.02 .. Over telephone line
- 110.01 **COMPOSITE SUBSTATION OR TERMINAL (E.G., HAVING CALCULATOR, RADIO)**
- 111 **WITH USAGE MEASUREMENT (E.G., CALL OR TRAFFIC REGISTER)**
- 112.01 . Call traffic recording by computer or control processor
- 112.02 .. Redundant processor or backup processor
- 112.03 .. Estimating blocking probability
- 112.04 .. Threshold or limiting control (e.g., gapping control)
- 112.05 .. Optimization network configuration
- 112.06 .. Generalized statistics about telephone network usage
- 112.07 ... Carrier usage data
- 112.08 ... Trunk or path usage data
- 112.09 ... Specialized exchange
- 112.1 ... Traffic rate for overload
- 114.01 . Call charge metering or monitoring
- 114.02 .. Least cost
- 114.03 .. Billing computing software or program
- 114.04 .. Charge error detection
- 114.05 .. Special service fees (e.g., customized feature)
- 114.06 .. Variable rate
- 114.07 ... Bandwidth
- 114.08 ... Traffic
- 114.09 ... Time controlled
- 114.1 .. Incentive billing
- 114.11 ... Gaming
- 114.12 ... Discount or bargaining
- 114.13 ... Advertisement



- 114.14 .. Fraud detection or control
- 114.15 .. Calling card
- 114.16 ... Recharging or replenishing an account or calling card
- 114.17 ... Monitoring account or card usage balance
- 114.18 ... Having complementary item (e.g., novelty)
- 114.19 ... Credit card
- 114.2 ... Pre-paid calling account or card
- 114.21 .. Redirect billing
- 114.22 ... Split billing or cost sharing
- 114.23 ... Third party billing
- 114.24 ... 1-800 billing
- 114.25 ... 1-900 billing
- 114.26 ... Based on unique account code
- 114.27 .. Portable number billing
- 114.28 .. Advanced intelligent billing network (e.g., a billing service control processor)
- 114.29 ... Using more than one advanced intelligent elements (e.g., accessing multiple AIN databases)
- 115.01 .. Interexchange billing operation
- 115.02 ... Long distance billing
- 115.03 ... Interfacing with foreign exchange
- 116 ... Hardcopy record generating
- 117 .. Of station on polystation or party line
- 118 ... Identification of station
- 119 .. Hardcopy record generating (e.g., ticket printing)
- 120 ... With line identification or class of service determination
- 121.01 .. At local exchange carrier (e.g., central switching office)
- 121.02 ... Discount charge rate or billing plan
- 121.03 ... Multiple billing account
- 121.04 ... Detail of call history and rates database
- 121.05 .... Call record modification
- 121.06 ... Having network terminating point receiving registration from subscriber terminal

- 122 ... With display
- 123 ... Paystation (e.g., escrow control)
- 124 ... Pulse counting or accumulating (e.g., "message metering")
- 125 .... Local or zone
- 126 .... Assembling billing record (e.g., automatic message account (AMA), call detail record (CDR), etc.)
- 127.01 ..... Having line identification associated with call billing (e.g., automatic number identification (ANI))
- 127.02 ..... Fraud control or billing restriction
- 127.03 ..... Billing code or trigger code
- 127.04 ..... Pricing a call made from different account (e.g., calling card, credit card)
- 127.05 ..... Billing option selection
- 127.06 ..... Having terminal identification
- 128 .... Time of day controlled
- 129 ... Manually set (e.g., key and lock)
- 130 .. At subscriber station
- 131 ... Time controlled
- 132 .... Paystation (e.g., escrow control)
- 133 . Call traffic recording or monitoring
- 134 .. At central station
- 135 ... With hardcopy record generation (e.g., ticket printing)
- 136 ... With display
- 137 ... Trunk usage (e.g., peg count)
- 138 .... All trunks busy metering
- 139 ... Counting the number of completed connections
- 140 .. At subscriber
- 141 ... Mechanical register
- 142.01** **RECEPTION OF CALLING INFORMATION AT SUBSTATION IN WIRELINE COMMUNICATIONS SYSTEM**
- 142.02 . Blocking caller ID transmission
- 142.03 .. Using a trigger code
- 142.04 . Extracting call ID from transmitted signal
- 142.05 .. Authentication or authorization
- 142.06 .. Matching and retrieving stored caller ID information from a database
- 142.07 . Routing an incoming call on multiple lines to a particular appliance (e.g., facsimile, computer, or telephone)
- 142.08 . Call waiting associated with caller ID information
- 142.09 . Non-assigned telephone number indication
- 142.1 . Caller location indication (e.g., city, state, etc.)

- 142.11 . Caller local time indication
- 142.12 . Including master-slave modules, parent-child terminals, or controller-adjunct units
- 142.13 . Adaptive module coupled to telephone line or telephone device
- 142.14 .. Format conversion
- 142.15 . Connecting to an external information processing terminal (e.g., computer)
- 142.16 . Having broadband premise equipment (e.g., TV)
- 142.17 . Having display unit
- 142.18 . Including DTMF signal
- 143 WITH CHECK OPERATED CONTROL (E.G., PAYSTATION)**
- 144.01 . Other than coin
- 144.02 .. Collect calling from payphone
- 144.03 .. Fraud detection in payphone
- 144.04 .. Card reader
- 144.05 .. Payphone service associated or integrated with other communication device (e.g., computer, fax, etc.)
- 144.06 .. Special circuitry for processing accounting data
- 144.07 .. Information message notification at paystation
- 144.08 ... Visual display
- 145 . Fraud or interference prevention
- 146 . Coin signalling or control
- 147 .. Coin box audit or totalizer
- 148 .. Denomination
- 149 .. Post-pay coin collection
- 150 .. Coin disposition (i.e., return or collection)
- 151 ... Upon connection to called station
- 152 ... Magnet, electromagnet, or relay controlled from central office
- 153 ... Paystation (e.g., controlled by refund key)
- 154 . At central office
- 155 . At terminal station (e.g., coin paystation)
- 156 MULTI-LINE OR KEY SUBSTATION SYSTEM WITH SELECTIVE SWITCHING AND CENTRAL SWITCHING OFFICE CONNECTION**
- 157 . With special service
- 158 .. Conferencing
- 159 . With intercom system
- 160 .. With connection of intercom station to subscriber line
- 161 . With exclusion or priority feature (e.g., lockout or privacy)
- 162 . Detail of hold circuitry

- 163 .. Electronic
- 164 . Line status indication or call alerting
- 165 . Switching or supervision feature (e.g., common control, digital)
- 166 . Detail of line circuit or line card
- 167.01 PRIVATE (E.G., HOUSE OR INTERCOM) OR SINGLE LINE SYSTEM**
- 167.02 . At collective house
- 167.03 . At booth (e.g., at theater, gas station, etc.)
- 167.04 .. Having intercom switch
- 167.05 . Doorbell system
- 167.06 .. Having access code
- 167.07 .. Having remote controlling station (e.g., gate guard or attendant)
- 167.08 .. Call addressing or announcing
- 167.11 .. Having connection to telephone line
- 167.12 .. Having display
- 167.13 . Having telephone adaptor system
- 167.14 . Two-way voice channel
- 167.15 . Having transducer circuitry
- 168 . Lockout
- 169 .. Central power source
- 170 . With paging
- 171 . Having plural stations with selective calling (e.g., master)
- 172 .. With call addressing
- 173 . With call addressing
- 174 . Including body or apparel supported terminal (e.g., headgear)
- 175 .. For underwater use (e.g., in diver's suit)
- 176 . With central power source
- 177 POLYSTATION LINE SYSTEM (I.E., PARTY LINE)**
- 178 . Revertive call
- 179 . Call alerting (e.g., ringing)
- 180 .. Full selective or tuned (e.g., harmonic)
- 181 .. Semi-selective (e.g., line side, polarized)
- 182 . Automatic or unattended
- 183 .. Station identification
- 184 .. Lockout
- 185 . Portable or mobile
- 186 . Central power source
- 187 . Connected to central office
- 188 CALL OR TERMINAL ACCESS ALARM OR CONTROL**

- 189 . Fraud or improper use mitigating or indication (e.g., "blue box", "black box")
- 190 . Time out
- 191 .. At switching center
- 192 ... Of call duration (e.g., conversation timer)
- 193 ... Of specific equipment
- 194 . Lockout or double use signalling
- 195 .. In automatic system
- 196 . At switching center
- 197 .. Central office
- 198 .. PBX
- 199 . At substation
- 200 .. Restrictive dialing circuit
- 201.01 SPECIAL SERVICES**
- 201.02 . Service profile (e.g., calling service)
- 201.03 .. Creation of service (e.g., using object oriented programming, primitive, function)
- 201.04 .. Display arrangement
- 201.05 .. Distribution of service (e.g., downloading, uploading)
- 201.06 . Locating using diverse technology (e.g., using infrared badge, sensor, card reader)
- 201.07 .. Called party
- 201.08 .. Calling party
- 201.09 .. Object
- 201.1 .. Detecting presence or absence of party or object
- 201.11 . Anonymous party (e.g., protection of called or calling party's identity, privacy)
- 201.12 . Provisioning
- 202.01 . Conferencing
- 203.01 .. Operator control
- 204.01 .. Subscriber control
- 205.01 ... Conferencing initiation by single calling station
- 206.01 .. At substation
- 207.01 . Three-way calling
- 207.02 . Service trigger (activation or deactivation)
- 207.03 .. Time (e.g., time of day, expiration of time period, time zone, date)
- 207.04 .. Line or loop condition

- 207.05 ... Busy signal (e.g., off hook)
- 207.06 ... Transition from off-hook to on-hook (e.g., busy to idle, hook flash)
- 207.07 ... Transition from on-hook to off-hook (e.g., idle to busy)
- 207.08 ... No answer (e.g., ringing signal, on-hook, idle)
- 207.09 .... Number of rings
- 207.1 .... Expiration of predetermined time period
- 207.11 .. Service access code
- 207.12 .. Party location
- 207.13 .. Party identification or validation (e.g., personal identification number (PIN))
- 207.14 .. Dialed number identification service (DNIS)
- 207.15 .. Automatic number identification or calling number identification (ANI or CLID)
- 207.16 .. Ringing signal (e.g. having a predetermined cadence or distinctive ring)
- 208.01 . Priority override (e.g., butt-in)
- 209.01 . Repetitive call attempts (e.g., camp-on-busy, retry)
- 210.01 . Reserved call (e.g., return call, call back, scheduled call, reestablished call)
- 210.02 . Call blocking
- 210.03 .. Call from anonymous caller
- 211.01 . Call diversion (e.g., call capture)
- 211.02 .. Call forwarding
- 211.03 ... Sequential ringing
- 211.04 ... Simultaneous ringing
- 211.05 ... Smart card
- 212.01 .. Call transfer
- 213.01 .. Intercept (e.g., dead or changed number)
- 214.01 .. Secretarial or answering service
- 215.01 . Call Waiting
- 216.01 . Abbreviated dialing or direct call (e.g., hot line)
- 217.01 . Audible paging

- 218.01 . Automatic directory service (e.g., on-line)
- 218.02 . Performed by operator (e.g., butt-in, busy verification)
- 219 PLURAL EXCHANGE NETWORK OR INTERCONNECTION**
- 220.01 . With interexchange network routing
- 221.01 .. Alternate routing
- 221.02 ... Service provider selection (e.g., local or long distance, primary and alternate carriers)
- 221.03 ... Failure (e.g., disaster, overload, blockage)
- 221.04 .... Restoration (e.g., backup, recovery)
- 221.05 .. Based upon historical data
- 221.06 .. Algorithm (e.g., software, computer program)
- 221.07 ... Parameter optimization or enhancement (e.g., capacity or bandwidth)
- 221.08 .. Advanced intelligent network (AIN)
- 221.09 ... Service control point (SCP, ISCP, external database)
- 221.1 ... Signal transfer point (STP, ISTP)
- 221.11 ... Adjunct or intelligent peripheral (IP)
- 221.12 ... Service switching point (SSP)
- 221.13 .. Local number portability (LNP)
- 221.14 . Routing parameter (e.g., area code, address, service provider identifier)
- 221.15 . Connection call model (e.g., virtual network, displayed models)
- 222 . Toll center
- 223 .. With operator assistance
- 224 . Tandem switching center
- 225 . Multi-PBX interconnection
- 226 . Having a manual exchange
- 227 .. With an automatic exchange
- 228 ... Having signalling to operator
- 229 . Interexchange signalling
- 230 .. Signalling path distinct from trunk (e.g., CCIS)
- 231 .. Central office-to-PBX signalling
- 232 ... PBX trunk groups
- 233 ... Direct inward dialing
- 234 .. PBX to central office signalling (e.g., direct outward dialing)
- 235 .. Voice frequency signalling over trunk
- 236 .. D.C. signalling over trunk

<u>237</u>	... Pulse or digital signalling
<u>238</u>	.... Having signalling repeater
<u>239</u>	.... Using register-sender
<u>240</u>	.. Interexchange trunk circuit
<u>241</u>	... Glare or simultaneous seizure mitigation
<b><u>242</u></b>	<b>CENTRALIZED SWITCHING SYSTEM</b>
<u>243</u>	. Class of service determination or transmission
<u>244</u>	.. In common control system
<u>245</u>	. Identification
<u>246</u>	.. Of line or trunk
<u>247</u>	... With display
<u>248</u>	... Using matrix
<u>249</u>	... For nuisance call mitigation
<u>250</u>	. Four-wire switching
<u>251</u>	. With generating of call associated substation signal
<u>252</u>	.. For alerting signal at called station (e.g., ringing)
<u>253</u>	... Electronic
<u>254</u>	... Associated with connector
<u>255</u>	... With interrupter
<u>256</u>	.. Having automatic or through ringing
<u>257</u>	.. For calling station (e.g., status or progress tones)
<u>265.01</u>	. Call distribution to operator
<u>265.02</u>	.. Automatic call distributor (ACD) system
<u>265.03</u>	... Reporting status (e.g., supervisory reporting)
<u>265.04</u>	.... Log-on or log-off of agent
<u>265.05</u>	.... Agent assignment (e.g., allocation of agent's time to a specific task)
<u>265.06</u>	.... Monitoring agent performance (e.g., quality of agent's performance)
<u>265.07</u>	..... Speech of agent or customer (e.g., talk time)
<u>265.08</u>	..... Average call length
<u>265.09</u>	... Having a multimedia feature (e.g., connected to Internet, E-mail, etc.)
<u>265.1</u>	... Predictive (e.g., anticipating next available agent)
<u>265.11</u>	... Routing to available agent
<u>265.12</u>	.... Based on agent's skill (e.g., language spoken by agent)
<u>265.13</u>	.... Based on type of call
<u>265.14</u>	.... Based on time (e.g., longest waiting agent)
<u>266.01</u>	... Call or agent queuing
<u>266.02</u>	.... Based on type of call



- 266.03 .... Based on time (e.g., age of queued call, time of day, date)
- 266.04 .... Overflow (e.g., queue-to-queue, ACD-to-ACD)
- 266.05 .... Split
- 266.06 .... Estimating or reporting waiting time
- 266.07 ... Call campaign (e.g., script, application, inbound/outbound balancing)
- 266.08 .... Predictive algorithm
- 266.09 ... Home agent
- 266.1 ... Call record
- 258 . Switching controlled in response to called station addressing signal
- 259 .. Including deflected electron beam switching device or mechanical or optical switching control (e.g., fluidic)
- 260 .. With operator position or completion of call (e.g., dial "O", semiautomatic)
- 261 ... Operator controlled register-sender
- 262 ... Call extension by operator
- 263 .... With call indicator or announcer
- 264 .... A to B operator
- 267 ... Operator's console
- 268 .. Having shared or common switching control
- 269 ... Distributed control
- 270 ... In-stage or interstage scanning (e.g., link scanning)
- 271 ... Having multistage switching
- 272 .... Path selection or routing
- 273 ..... Alternate routing
- 274 ..... With busy or idle test
- 275 ..... Including marking circuit
- 276 ..... End-to-end marking (e.g., self-seeking)
- 277 ..... With busy or idle test
- 278 .... Interstage junctor or "trunk"
- 279 ... Control reliability (e.g., redundancy)
- 280 ... Including registering or storing device for call address signal
- 281 .... Conversion between dial pulse and voice frequency signal
- 282 .... Voice frequency receiver
- 283 ..... Dual tone multifrequency (DTMF) receiver
- 284 .... With processor
- 285 .... With magnetic memory
- 286 .... Signal processing (e.g., dial pulse analysis)
- 287 .... Electronic
- 288 .... Register-sender
- 289 ... Translator
- 290 ... With time division of control or supervisory signals
- 291

	... With detail of crosspoint switching structure (e.g., crossbar)
<u>292</u>	.... Electronic crosspoint (e.g., solid-state)
<u>293</u>	.. Having line finder
<u>294</u>	... Including electronic element (e.g., tube or semiconductor)
<u>295</u>	... Plural
<u>296</u>	.. With repeater
<u>297</u>	.. Having specified busy-idle test
<u>298</u>	.. Direct control
<u>299</u>	... Step-by-step system
<u>300</u>	.... Having plural wiper sets
<u>301</u>	.... Having potential control
<u>302</u>	.... Having rotary switch
<u>303</u>	.... Coordinate system (e.g., X-Y)
<u>304</u>	... All relay type
<u>305</u>	... Having motor-driven switch
<u>306</u>	.. With crosspoint switch detail
<u>307</u>	.. With power supply
<u>308</u>	. Switching apparatus for connecting calling line to operator's position
<u>309</u>	.. Call distribution or queuing
<u>310</u>	. Divided central (e.g., communication between switchboards)
<u>311</u>	.. Having signalling path feature
<u>312</u>	. Having multiple answering jacks for multiplied line
<u>313</u>	. Multiple section switchboard
<u>314</u>	.. Auxiliary (e.g., overflow)
<u>315</u>	. With line-signal control
<u>316</u>	.. Spring-jack cut-off
<u>317</u>	.. Relay cut-off
<u>318</u>	.. Central power source
<u>319</u>	. Single switchboard (e.g., cord circuit)
<u>320</u>	.. Switchboard circuit
<u>321</u>	... Connection to operator's terminal
<u>322</u>	. Power supply
<u>323</u>	.. Power to switching equipment
<u>324</u>	.. Central power source (e.g., common battery, line current feed)
<u>325</u>	. Structure of equipment
<u>326</u>	.. Wire or cable distribution
<u>327</u>	... Main or intermediate distribution frame
<u>328</u>	.. Equipment mounting or support
<u>329</u>	... Allowing movement of equipment (e.g., movable, modular)
<u>330</u>	.. Housing
<u>331</u>	. Having protective circuit
<u>332</u>	. Plug and socket
<u>333</u>	<b>CONCENTRATOR OR TRUNK SELECTOR</b>
<u>334</u>	. Concentrator-distributor pair (e.g., line concentrator)
<u>335</u>	. Using crossbar or crosspoint switching
<u>336</u>	. With magnet, electromagnet, or relay
<u>337</u>	. With busy-idle test (e.g., idle trunk finder)

**338 REPEATER (E.G., VOICE FREQUENCY)**

- 339 . With signal conversion (e.g., dial to DTMF, analog to PCM)
- 340 . Having line length compensation or equalization
- 341 . Pulse or tone repeater (e.g., electromechanical relay)
- 342 .. Electronic (e.g., logic circuitry)
- 343 . Controlled by a pilot or reference signal
- 344 . Component processes bidirectional signals
- 345 .. Including two-to-four wire conversion or hybrid circuit
- 346 . With frequency discriminator or negative impedance element
- 347 . With gain or attenuation control
- 348 . Transmission of power to distant repeater
- 349 . Having voice frequency transformer

**406.01 ECHO CANCELLATION OR SUPPRESSION**

- 406.02 . Combined diverse function
- 406.03 .. Additional signal enhancement (e.g., voice processing or recognition)
- 406.04 . Disable or inhibit function
- 406.05 . Residual echo cancellation
- 406.06 . Using digital signal processing
- 406.07 .. Using attenuator
- 406.08 .. Adaptive filtering
- 406.09 ... Least mean squares (LMS) algorithm
- 406.1 ... With training sequence
- 406.11 .. Convolution processing
- 406.12 .. Frequency domain analysis
- 406.13 ... Fourier analysis
- 406.14 ... Sub-band analysis
- 406.15 .. Additional analog processing
- 406.16 . Having analog variolossor or attenuator

**350 SUPERVISORY OR CONTROL LINE SIGNALING**

- 351 . Signalling integrity protection (e.g., voice signal immunity)
- 352 . Substation originated
- 353 .. Conversion of signal form
- 354 .. With called number display
- 355.01 .. Repertory or abbreviated call signal generation
- 355.02 ... Call address signal stored in terminal

- 355.03 .... Including terminal other than telephone
- 355.04 ... Call address signal stored in network
- 355.05 ... Modification of call address signal for abbreviated dialing
- 355.06 .... Modification by other than key input
- 355.07 .... Including modification of indicia associated with a call address
- 355.08 ... Including prefix in the call address signal
- 355.09 ... Selection of registered call address signal
- 355.1 .... Selection of multiple call address signals
- 356.01 ... Including dynamic memory
- 357.01 ... Insertable control element or circuitry (e.g., card)
- 357.02 .... Personal computer memory card (PCMCIA)
- 357.03 ... Acoustical generation
- 357.04 ... Circuitry of call signal generator
- 357.05 ... Including solid state memory storage
- 358 ... By motor driven dial rotating device
- 359 ... Pulse signal generating (e.g., dialing)
- 360 .. Voice frequency band signalling (e.g., reed devices)
- 361 ... Electronic (e.g., tone generator)
- 362 .. Pulse signal generator (e.g., rotary dial)
- 363 ... Control of motor driven dial rotating device
- 364 ... With nonrotary actuator (e.g., key or slide type)
- 365 ... Specified switching contact (e.g., contact spring)
- 366 ... With detail of dial return mechanism (e.g., driving spring, speed governor)
- 367 ... Finger wheel or mechanical adjunct (e.g., finger stop)
- 368 .. Plural-switch number input device (e.g., keypad)
- 369 .. Detail of mounting of switch pad or dial
- 370 ... In handset
- 371 .. Magneto signalling
- 372 . Signal reception at substation
- 373.01 .. Incoming call alerting
- 373.02 ... Distinctive or selective alerting
- 373.03 .... Registration of alerting signal in association with incoming signal
- 373.04 ..... Recording audio for use as the alerting signal
- 373.05 .... Directing incoming call to local appliance

- 374.01 ... Including musical sound generation
- 374.02 ... Including audible message generation
- 374.03 ... Alerting by other than sight or sound (e.g., vibration)
- 375.01 ... Having electronic call sounder (e.g., tone "ringer")
- 376.01 ... Visual indication of incoming call (e.g., LED or light bulb)
- 376.02 .. Silencing ring signal
- 377 . Using line or loop condition detection (e.g., line circuit)
- 378 .. With current controlling electromagnetic core device (e.g., Hall-effect device)
- 379 .. With optical link between line and switching system
- 380 .. By bridge circuit
- 381 .. Busy test or make busy
- 382 .. For ring trip or polarity reversal detection
- 383 .. Of plural lines
- 384 ... By scanning
- 385 .. Relayless
- 386 . Signal receiver (e.g., tone decoder)
- 387.01 SUBSTATION OR TERMINAL CIRCUITRY**
- 387.02 . Conversion of signal form (e.g., A/D, frequency or phase)
- 388.01 . For loudspeaking terminal
- 388.02 .. Speakerphone with build-in microphone
- 388.03 ... Automatic gain or volume (AGC or AVC)
- 388.04 .. Voice control of transmission direction
- 388.05 ... Voice switching by attenuation/amplification
- 388.06 ... Comparing signal level of receiving and transmitting circuits
- 388.07 ... Controlling acoustic feedback
- 390.01 .. Amplification or attenuation level control
- 390.02 ... Filtering (FIR, HPF, Widrow-Hoff, LMS)
- 390.03 ... Automatic gain control
- 390.04 ... Hybrid circuit
- 391 . Sidetone control or hybrid circuit (e.g., induction coil)
- 392 .. Suppression (e.g., antisidetone)
- 392.01 . Noise suppression
- 393 . Hold circuit

- 394 . Impedance matching or line equalizing
- 395 . Amplifying (e.g., AGC or AVC)
- 395.01 . Power control or detection circuit
  
- 396 . Visual signalling (e.g., lamp)
- 397 . Wire distribution
- 398 LINE EQUALIZATION OR IMPEDANCE MATCHING**
- 399.01 SUBSCRIBER LINE OR TRANSMISSION LINE INTERFACE**
  
- 399.02 . Circuitry to provide a coder and decoder function
  
- 400 . For line length compensation
- 401 .. Voltage boosting circuit
- 402 . Hybrid circuit
- 403 .. With adjustable balance circuit
- 404 ... Automatic adjustment
- 405 .. Electronic noninductive
- 412 . Protective circuit
- 413 . Power supply (e.g., battery feed)
- 413.01 .. Circuitry to provide ringing current supply
  
- 413.02 . Network interface device (NLD)
  
- 413.03 .. Including connection for alternate communication line (e.g., cable)
  
- 413.04 .. Connection block or module
  
- 414 TRANSMISSION LINE CONDITIONING**
- 415 . Reactance neutralizing
- 416 . Interference suppression
- 417 .. Anticrosstalk
- 418 CALL SIGNAL GENERATING (E.G., RINGING OR TONE GENERATOR)**
- 419 TERMINAL**
- 420.01 . Having loudspeaking conversation capability (e.g., hands- free type or speakerphone)
- 420.02 .. Hands-free loudspeaker feature
- 420.03 .. Hands-free microphone feature
- 420.04 .. Hands-free accesory or attachment
  
- 421 . Having muting
- 422 . Switch or switch actuator structure
- 423 .. Line selection
- 424 .. Receiver or handset position responsive (e.g., hookswitch)
- 425 ... With mechanism for latching hookswitch or plunger against motion
- 426 ... Movable holder for receiver or handset
- 427 ... Having plunger and lever linkage
- 428.01 . Housing or housing component
  
- 428.02 .. Handset or headset combined with telephone base

- 428.03 .. Display on telephone base
- 428.04 .. Base having detachable accessory
- 429 .. Having distinct circuitry support structure (e.g., circuit board)
- 430 .. Body supported (e.g., headgear)
- 431 .. Separate housings for earphone and microphone (e.g., candlestick type)
- 433.01 .. Handset structure
- 433.02 ... Speaker mounting (i.e., speaker phone feature)
- 433.03 ... Microphone mounting
- 433.04 ... Display on handset
- 433.05 ... Connector
- 433.06 ... Button or switch having specific function
- 433.07 .... Keypad
- 433.08 ... Battery
- 433.09 ... Card (e.g., SIM or magnetic strip card)
- 433.1 ... Handset having special feature (e.g., wrist watch)
- 433.11 ... Moveable or removeable element (e.g., cover)
- 433.12 .... Slideable mechanism
- 433.13 .... Rotatable mechanism (e.g., hinge)
- 432 .. Loudspeaking set
- 434 .. Specified terminal configuration (e.g., novelty type)
- 435 .. Wall set or convertible type
- 436 .. Desk set
- 437 .. Protective structure
- 438 ... Of cord or connector
- 439 ... Antiseptic
- 440 .. Casing or enclosure, per se
- 441      **TERMINAL ACCESSORY OR AUXILIARY EQUIPMENT****
- 442 . With circuit connection to terminal
- 443 . Including coupler (e.g., inductive)
- 444 .. Acoustic
- 445 . Locking device
- 446 . Telephone receiver support
- 447 . Attachable to terminal housing
- 448 .. Hookswitch operator
- 449 .. Handset holder (e.g., shoulder rest)
- 450 .. Clips onto terminal structure

<u>451</u>	. Protective structure
<u>452</u>	.. Antiseptic, disinfecting, or disposable
<u>453</u>	. Hood or enclosure (e.g., booth)
<u>454</u>	. Support or stand
<u>455</u>	.. Handset holder
<u>456</u>	. Dialing tool
<b><u>457</u></b>	<b>MISCELLANEOUS</b>

## CROSS-REFERENCE ART COLLECTIONS

<u>900</u>	<b>INTERNET (E.G., INTERNET PHONE, WEBPHONE, INTERNET-BASED TELEPHONY)</b>
<u>901</u>	<b>VIRTUAL NETWORKS OR VIRTUAL PRIVATE NETWORKS</b>
<u>902</u>	<b>AUTO-SWITCH FOR AN INCOMING VOICE DATA, OR FAX TELEPHONE CALL (E.G., COMP/FAX/TEL)</b>
<u>903</u>	<b>PASSWORD</b>
<u>904</u>	<b>AUTO-CALLING</b>
<u>905</u>	<b>FAX MAIL</b>
<u>906</u>	<b>TOUCHTONE MESSAGE TRANSMISSION</b>
<u>907</u>	<b>SPEECH RECOGNITION VIA TELEPHONE SYSTEM OR COMPONENT</b>
<u>908</u>	<b>MULTIMEDIA</b>
<u>909</u>	<b>ALTERNATIVES</b>
<u>910</u>	<b>BAR CODE OR OPTICAL CHARACTER READER WITH TELEPHONE</b>
<u>911</u>	<b>DISTINCTIVE RINGING</b>
<u>912</u>	<b>GEOGRAPHICALLY ADAPTIVE</b>
<u>913</u>	<b>PERSON LOCATOR OR PERSON-SPECIFIC</b>
<u>914</u>	<b>PROGRAMMABLE TELEPHONE COMPONENT</b>
<u>915</u>	. "Soft" key
<u>916</u>	<b>TOUCH SCREEN ASSOCIATED WITH TELEPHONE SET</b>
<u>917</u>	<b>VOICE MENUS</b>

## FOREIGN ART COLLECTIONS

FOR000      **CLASS-RELATED FOREIGN DOCUMENTS**

Any foreign patents or non-patent literature from subclasses that have been reclassified have been transferred directly to FOR Collection listed below. These collections contain ONLY foreign patents or nonpatent literature. The parenthetical references in the Collection titles refer to the abolished subclasses from which these Collections were derived.

<u>FOR100</u>	<b>HAVING NEAR FIELD LINK (E.G., CAPACITIVE, INDUCTIVE) (379/55)</b>
<u>FOR101</u>	<b>HAVING ELECTROMAGNETIC LINK FOR SPEECH OR PAGING SIGNAL (E.G., LIGHT WAVE LINK) (379/56)</b>
<u>FOR102</u>	. Control of selectively responsive paging arrangement over telephone line (379/57)
<u>FOR112</u>	<b>TELEPHONE LINE OR SYSTEM COMBINED WITH DIVERSE ELECTRICAL SYSTEM OR SIGNALLING (E.G., COMPOSITE) (379/90)</b>
<u>FOR113</u>	. Credit authorization (379/91)
<u>FOR114</u>	. Polling (e.g., audience survey) (379/92)
<u>FOR115</u>	. With transmission of a digital message signal over a telephone line (379/93)



- FOR116 .. Including switching station (379/94)
- FOR117 .. Access restricting (379/95)
- FOR118 .. Including terminal for display of digital information (379/96)
- FOR119 .. By voice frequency signal (e.g., tone code) (379/97)
- FOR120 ... By modulated audio tone (379/98)
- FOR121 ... Having acoustic link (379/99)
- FOR122 . To produce visual-graphic copy reproduction (e.g., facsimile) (379/100)
- FOR123 . Audio program distribution (379/101)
- FOR124 . Remote control (379/102)
- FOR125 .. Of entrance or exit lock (379/103)
- FOR126 .. With indication (379/104)
- FOR127 .. From terminal (379/105)
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- FOR133 **WITH AUDIO MESSAGE STORAGE AND RETRIEVAL (379/67)**
- FOR134 . Stored in digital form (379/88)
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- FOR136 . DIAGNOSTIC TESTING, MALFUNCTION, INDICATION, OR ELECTRICAL CONDITION MEASUREMENT (379/1)
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- FOR139 .. By automatic testing sequence (e.g., programmable, scanning) (379/10)
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- FOR142 . Of subscriber loop or terminal (379/27)
- FOR143 .. Terminal arrangement to enable remote testing (e.g., testing interface) (379/29)

- FOR144 . Indication of nonstandard condition of telephone equipment (379/32)
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- FOR148 .. Call charge metering or monitoring (379/114)
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- FOR190 .. Disable or inhibit (379/407)
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- FOR194 ... Having transversal filter (379/411)
- FOR195 . Having loudspeaking conversation capability (e.g., hands-free type or speakerphone) (379/420)
- FOR196 . Housing or housing component (379/428)
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*Last modified 05/14/2003 15:55:14*

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